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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,808

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Amir Meir

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EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,808	<b>Applicant(s)</b> MEIR ET AL.	
	<b>Examiner</b> YOUNG T. TSE	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 11, 2008 has been entered.

### ***Response to Arguments***

2. Applicant's argument, see page 9, filed June 11, 2008, with respect to 35 U.S.C. §103(a), have been fully considered and are persuasive. The rejection of claims 21-27 has been withdrawn.
3. Applicant's arguments filed June 11, 2008 have been fully considered but they are not persuasive.

Applicant argues that Brown and/or Ngai describe, at most, power adjustment in an uplink section based on signal processing performed in the downlink section (see Brown, Figure 2 and the text corresponding thereto). The power adjustment of Browne and/or Ngai is thus fundamentally different from the output power level sustaining of claims 1 and 15, which includes sustaining of output power level of an uplink section of a repeater based on operations performed in the uplink section, or sustaining of output

power level of a downlink section of a repeater based on operations performed in the downlink section.

The examiner respectfully disagrees with Applicant's interpretation that the power adjustment of Brown and/or Ngai is thus fundamentally different from the output power level sustaining of claims 1 and 15.

Brown discloses a cellular telephone transceiver in Figure 2 comprising a receiver 38 and a transmitter 40, wherein the cellular telephone transceiver shown in Figure 2 is used in a prior art cellular network a large number of mobile telephone system users, each having a cellular phone, communicate through repeaters or terrestrial stations organized in a number of cells which extend over a limited geographical area as shown in Figure 1 (col. 1, lines 15-18).

Figure 3 illustrates a simplified block diagram of the transmitter section 40 of the cellular telephone of Figure 2 showing the control system and the power control circuits in greater detail. Even without the teaching of Ngai reference for the power control levels, Brown teaches that "power level control is effected by the transmission of a power level command by a base station 17 or 18 which is received by a cellular phone receiver 38 and input to the control system 68 of FIGS.2 and 3. The microprocessor 94 of the control system 68 then inputs the power level command into the DAC 96, which should be selected to cover the entire range of output power levels." (col. 4, lines 38-44). Brown also teaches that "the gain of the amplifier 99 is initially set to minimum by the microprocessor 94. This provides minimum gain in the feedback path and

maximum forward path gain. This is therefore the maximum output power.” (col. 4, lines 64-67).

According to the present invention described in paragraph [0038] of the specification and recited in claims 8 and 9, “sustaining the output power level of an uplink section and/or a down link section of a repeater substantially at a desired, predetermined, level during operation of a network” is either a maximum or optimal output power level.

### ***Claim Objections***

4. Claims 1-6 and 8-27 are objected to because of the following informalities:

Claim 1, lines 5, 7 and 9, the phrase “said section” should be “said at least one section” since claim 1 recites a downlink section and an uplink section.

Claim 5 (line 3), claim 6 (line 3), claim 12 (lines 3-5), and claim 13 (lines 3 and 4), “up-link section” and “down-link section” should be “uplink section” and “downlink section”, respectively.

The dependent claims 2-4, 8-11 and 14 depend from the independent claim 1.

Claim 15, lines 7 and 12, “the RF input signal” and “the power” should be “the received RF input signal” and “the monitored power”, respectively.

The dependent claim 16 depends from the independent claim 15.

Claims 17-20, line 2, “gain controller” should be “RF gain controller”.

Claim 21, lines 3-4, the term “the group consisting” should be removed.

Claim 24, line 8, "a said network" should be "said network".

Claim 27, lines 2-3, "by sending to said" appears to read "of the system by sending".

The dependent claims 22-23, and 25-26 depend from the independent claim 21.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6, 8-14 and 21-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 7-10, the adjusting and sustaining steps both lack cooperation or connection with the precedent and/or sampling steps.

Claims 8 and 9, lines 1-2, the term "said predefined output power level" lacks antecedent basis.

The dependent claims 2-6 and 10-14 depend from the independent claim 1.

Claim 21, lines 6-14, the filtering unit, the attenuator, and the power amplifier unit all lack connection or cooperation with the receiver and/or the precedent claimed element(s).

Claim 24, lines 3-5 and claim 25, lines 5-7, the additional attenuator, the high-power amplifier, and the digital filter also lacks connection or cooperation with the claimed element(s) of the precedent claim 21 and/or precedent claimed element(s) in claims 24 and 25.

Claim 24, line 5, "the term "said power output" also lacks antecedent basis.

The dependent claims 22-23 and 26-27 either depend directly or indirectly from the independent claim 21.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6, 8-13 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al. (U. S. Patent No. 6,259, 682, hereinafter "Brown").

Brown discloses a cellular telephone transceiver in Figure 2 comprising a receiver 38 and a transmitter 40, wherein the cellular telephone transceiver shown in Figure 2 is used in a prior art cellular network a large number of mobile telephone system users, each having a cellular phone, communicate through repeaters or terrestrial stations organized in a number of cells which extend over a limited geographical area as shown in Figure 1. (col. 1, lines 15-18)

Figure 3 illustrates a simplified block diagram of the transmitter section 40 of the cellular telephone of Figure 2 showing the control system and the power control circuits in greater detail.

Regarding claims 1 and 8-9, the transmitter 40 or uplink section shown in Figure 2 and/or Figure 3 comprises transmitter signal processor/up-converter (70,74), system controller 68, and/or microprocessor 94 for sampling data or traffic load characteristics from an input RF, for example, a base station 1 (17) and/or base station 2 (18); the system controller 68 and/or the microprocessor 94 for adjusting a gain of the variable gain amplifier (78, 80, 99) based on the data; and the system controller 68 and/or the microprocessor 94 for sustaining the output power level of the transmitter 40 of an optimal or maximum power level of the cellular telephone transceiver. For example, Brown teaches that "power level control is effected by the transmission of a power level command by a base station 17 or 18 which is received by a cellular phone receiver 38 and input to the control system 68 of FIGS.2 and 3. The microprocessor 94 of the control system 68 then inputs the power level command into the DAC 96, which should be selected to cover the entire range of output power levels." (col. 4, lines 38-44). Brown also teaches that "the gain of the amplifier 99 is initially set to minimum by the microprocessor 94. This provides minimum gain in the feedback path and maximum forward path gain. This is therefore the maximum output power." (col. 4, lines 64-67).

According to the present invention described in paragraph [0038] of the specification and recited in claims 8 and 9, "sustaining the output power level of an uplink section and/or a down link section of a repeater substantially at a desired,

predetermined, level during operation of a network” is either a maximum or optimal output power level.

Regarding claim 2, since the cellular phone shown in Figure 2 is either the cellular phone 24 or 26 for communication with the base stations 17 and 18, therefore, the data being sampled is related to changing paths of actual levels of traffic of the base stations.

Regarding claims 3 and 4, since the transmitter 40 shown in Figure 3 comprises a feed forward loop and a feedback loop, therefore, the data being sampled is according to a predetermined scheme and/or at predetermined time interval. Also see col. 4, lines 29-36.

Regarding claims 5 and 6, the data being sampled by the transmitter signal processor/up-converter (70, 74), the system controller 68, and/or the microprocessor 94 is by one or more components of the transmitter 40 and/or the receiver 38.

Regarding claims 10 and 11, the cellular telephone transceiver shown in Figure 2 and/or Figure 3 is partially integrated in digital manner and partially integrated in analog manner.

Regarding claims 12 and 13, since the cellular phone 24 or 26 of Figure 1 shown in Figure 2 is a transceiver comprising the transmitter 40 or uplink section and the receiver 38 or downlink section, and the system controller 68 and/or the microprocessor 94 are used to adjust the one or more component of the variable gain amplifiers 78, 80 and 99, which control power level to the amplifiers 46, 50, 56 and 62 of the receiver 38 or downlink section.

Regarding claims 15, 16 and 20, the transmitter signal processor 70 receives an RF data, for example, from a base station 17 or 18 shown in Figure; the attenuator 99 produces an attenuated signal by attenuating a parameter of the RF data; the power amplifier 80 produces an output signal by amplifying the attenuated signal from the attenuator 99; the power monitor 90 and/or 102 monitors the power level of the output signal; and the system controller 68 and/or the microprocessor 94 sample traffic load characteristics of the RF data during operation of a network to adjust the power level of the output signal by controlling the gain of the RF data by the attenuator 99 based on the sampled traffic load characteristics and sustain the output power level at an optimal or maximum power level as described earlier in claim 1.

Regarding claims 17 and 18, since the transmitter 40 shown in Figure 3 comprises a feed forward loop and a feedback loop, therefore, the data is repeatedly and/or automatically sampled by the transmitter signal processor 70, the system controller 68 and/or the microprocessor 94 at predetermined time interval. Also see col. 4, lines 29-36.

Regarding claim 19, since the control system 68 also received the downlink signal from the receiver signal processor 64, therefore, the gain control of the sample data is upon the request of the receiver signal processor 64.

***Allowable Subject Matter***

9. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Claims 21-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and the objection(s), set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is 571- 272-3051. The examiner can normally be reached on Monday-Friday 10:00-6:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on 571- 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YOUNG T. TSE/  
Primary Examiner, Art Unit 2611